



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,172	03/11/2004	Bernd Aumann	ZAHFRI P604US	7581
20210	7590	03/31/2006	EXAMINER	
DAVIS & BUJOLD, P.L.L.C. FOURTH FLOOR 500 N. COMMERCIAL STREET MANCHESTER, NH 03101-1151			LE, DAVID D	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Interview Summary</b>	Application No.	Applicant(s)	
	10/798,172	AUMANN, BERND	
	Examiner	Art Unit	
	David D. Le	3681	

All participants (applicant, applicant's representative, PTO personnel):

(1) David D. Le. (3)\_\_\_\_\_

(2) Gary D. Clapp. (4)\_\_\_\_\_

Date of Interview: 24 March 2006.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
If Yes, brief description: \_\_\_\_\_

Claim(s) discussed: 17, 18 and 24.

Identification of prior art discussed: Evans'520 and Nakagami'248.

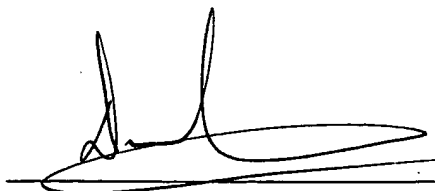
Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: By further amending the proposed change to the above mentioned claims (17, 18 and 24) to include the terms "the varying" preceding the phrase "positions of the driving pedal and the selector lever", the above mention, the proposed claims appear to overcome the applied references.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

  
 Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

MICHAEL J. BUJOLD  
(ADMITTED IN NH & ME)

NEAL E. FRIEDMAN  
(ADMITTED IN MA ONLY)

SCOTT DANIELS  
(ADMITTED IN NH)

JAY S. FRANKLIN  
(TECHNICAL SPECIALIST)

LAW OFFICES  
**DAVIS & BUJOLD, P.L.L.C.**  
FOURTH FLOOR  
500 NORTH COMMERCIAL STREET  
MANCHESTER, NEW HAMPSHIRE 03101  
UNITED STATES OF AMERICA

TELEPHONE (603) 624-9220  
FACSIMILE (603) 624-9229  
E-mail: [patent@davisandbujold.com](mailto:patent@davisandbujold.com)

## OF COUNSEL

ANTHONY G.M. DAVIS  
(ADMITTED IN NY ONLY)  
CHARTER PATENT AGENT (U.K.)  
EUROPEAN PATENT ATTORNEY

GARY D. CLAPP  
(ADMITTED IN MA)

BOSTON ADDRESS:  
P.O. BOX 67463  
BROOKLINE MA 02467

**FACSIMILE TRANSMITTAL**

TO: David D. Le FAX #: (571)273-7092  
COMPANY: U.S. Patent & Trademark Office - Group Art Unit #3681  
FROM: Gary D. Clapp TOTAL NO. OF PAGES SENT: 7  
DATE: February 28, 2006  
REMARKS AND ENCLOSURES:

In re Appln. of: Bernd AUMANN  
Serial No.: 10/798,172  
Filed: March 11, 2004  
For: DRIVE TRAIN FOR A MOBILE VEHICLE AND METHOD FOR THE  
CONTROL OF THE DRIVE TRAIN  
Group Art Unit: 3681  
Examiner: David D. Le  
Docket: ZAHFRI P604US

RECEIVED: Six (6) page DRAFT Supplemental Response.

\*\*\*\*\*  
**CONFIDENTIALITY NOTE**

The document(s) accompanying this telefaxed transmission contains information from the law firm of DAVIS & BUJOLD, P.L.L.C. which is confidential and/or privileged. The information is intended to be for the use by the individual or entity named on this transmission sheet. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use of the contents of this telefaxed information is prohibited. If you have received this transmission in error, please notify our office by telephone immediately so that we can arrange for the retrieval of the enclosed documents at no cost to you.

\*\*\*\*\*

## PATENT APPLICATION

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Bernd AUMANN  
Serial no. : 10/798,172  
Filed : March 11, 2004  
For : DRIVE TRAIN FOR A MOBILE VEHICLE AND  
METHOD FOR THE CONTROL OF THE DRIVE  
TRAIN  
Group Art Unit : 3681  
Examiner : David D. LE  
Docket : ZAHFRI P604US

**MAIL STOP AF**

The Commissioner for Patents  
U.S. Patent & Trademark Office  
P. O. Box 1450  
Alexandria, VA 22313-1450

*DRAFT*

**PROPOSED SUPPLEMENTAL RESPONSE IN REPLY TO ADVISORY ACTION  
ISSUED TO AFTER FINAL RESPONSE PURSUANT TO 37 CFR 1.11**

Dear Sir:

[XXX] NO FEES ARE PAYABLE WITH RESPECT TO THIS RESPONSE.

The following proposed supplemental response is submitted for the Examiner's consideration with respect to the Advisory Action of February 16, 2006, which is issued in response to the Response After Final Pursuant to 37CFR 1.116 of February 6, 2006, which was submitted in reply to the Final Office Action of January 9, 2006.

**In the Claims:**

Please amend claims 17, 18 and 24 as follows in which the claim additions are shown by underlining and/or the claim deletions are shown by strikeout or brackets. Please enter the amended claims into the record of this case.

10/798,172

**DRAFT**

1-16. (CANCELED)

17. (CURRENTLY AMENDED) A drive train for a mobile vehicle comprising:

a drive engine (1) for driving both a shiftable step-down transmission (5), for driving a propulsion drive, and an auxiliary drive (6), for driving a hydraulic pump (7) of a working hydraulic system;

a hydrodynamic torque converter coupling the drive engine (1) to the shiftable step-down transmission (5) and a converter bridging clutch (2) releasably coupling a pump impeller (3) of the hydrodynamic torque converter to the drive engine (1); and

an electronic control unit (10) for receiving a signal from a selector lever (8) and controlling operation of the working hydraulic system and receiving a signal from a driving pedal (11) and controlling operation of the propulsion drive, and the electronic control unit (10) controlling the drive engine (1) and the clutch (2) to establish a driving speed of the propulsion drive and a speed of the auxiliary drive (6) dependent upon positions of the driving pedal (11) and the selector lever (8); and

when the drive engine (1) is operating at maximum power, the clutch (2) is engaged and the selector lever (8) is then actuated, the clutch (2) is actuated in a disengaging direction and the drive engine (1) is regulated so that the auxiliary drive (6) reaches a defined speed and a driving speed of the propulsion drive is dependent upon positions of the driving pedal (11) and the selector lever (8) and is reduced as the driving resistance increases.

18. (CURRENTLY AMENDED) A method for controlling a drive train of a mobile vehicle having a drive engine (1) driving both a shiftable step-down transmission (5), via a hydrodynamic torque converter, and an auxiliary drive (6), for powering a hydraulic pump (7) for a working hydraulic system, and a converter bridging clutch (2) releaseably engages a pump impeller (3) of the hydrodynamic torque converter with the drive engine (1) for driving a propulsion drive, the method comprising the steps of:

sending a signal from a selector lever (8), for controlling operation of the working hydraulic system, and sending a signal from a driving pedal (11), for controlling a speed of the propulsion drive, to an electronic control unit (10);

10/798,172

**DRAFT**

controlling the drive engine (1) and the clutch (2), via the electronic control unit (10), to establish a driving speed of the propulsion drive and a speed of the auxiliary drive (6) dependent upon positions of the driving pedal (11) and the selector lever (8); and

when the drive engine (1) is operating at maximum power, the clutch (2) is engaged and the selector lever (8) is actuated, actuating the clutch (2) in a disengaging direction and regulating the drive engine (1) so that the auxiliary drive (6) reaches a defined speed and a driving speed of the propulsion drive is dependent upon positions of the driving pedal (11) and the selector lever (8) and is reduced as the driving resistance increases.

19. (PREVIOUSLY AMENDED) The method for controlling the drive train according to claim 18, further comprising the step of, when the selector lever (8) is actuated and the clutch (2) is engaged, actuating the clutch (2) in the disengaging direction a sufficiently amount in order for the auxiliary drive (6) to reach the defined speed.

20. (PREVIOUSLY AMENDED) The method for controlling the drive train according to claim 18, further comprising the step of, when the drive engine (1) is operating below the maximum power and the clutch (2) is engaged and the selector lever (8) is then actuated, actuating the clutch (2) in the disengaging direction and regulating the drive engine (1) such that the auxiliary drive (6) reaches the defined speed and the driving speed corresponds to a speed specified by a position of the driving pedal (11).

21. (PREVIOUSLY SUBMITTED) The method for controlling the drive train according to claim 18, further comprising the step of, when the selector lever (8) is actuated and the driving pedal (11) is actuated in a direction of lower speed, increasing a speed of the drive engine (1).

22. (PREVIOUSLY SUBMITTED) The method for controlling the drive train according to claim 18, further comprising the step of reducing a driving speed of the propulsion drive by actuating a service brake (12).

23. (PREVIOUSLY SUBMITTED) The method for controlling the drive train according to claim 18, further comprising the step of, when the selector lever (8) is actuated and the driving pedal (11) is actuated in a direction of higher speed, increasing

10/798,172

**DRAFT**

a speed of the auxiliary drive (6) and shifting the shiftable step-down transmission (5) in a direction of a higher transmission ratio.

24. (CURRENTLY AMENDED) A method for controlling a drive train of a mobile vehicle having a drive engine (1) driving both a shiftable step-down transmission (5), via a hydrodynamic torque converter, and directly driving an auxiliary drive (6), for powering a hydraulic pump (7) for a working hydraulic system, and a converter bridging clutch (2) releaseably engages a pump impeller (3) of the hydrodynamic torque converter with the drive engine (1) for driving a propulsion drive, the method comprising the steps of:

    sending a signal from a selector lever (8), for controlling operation of the working hydraulic system, and sending a signal from a driving pedal (11), for controlling a speed of the propulsion drive, to an electronic control unit (10);

    controlling the drive engine (1) and the clutch (2), via the electronic control unit (10), to establish a driving speed of the propulsion drive and a speed of the auxiliary drive (6) dependent upon positions of the driving pedal (11) and the selector lever (8); and

    when the drive engine (1) is operating at maximum power, the clutch (2) is engaged and the selector lever (8) is actuated, actuating the clutch (2) in a disengaging direction and regulating the drive engine (1) so that the auxiliary drive (6) reaches a defined speed and a driving speed of the propulsion drive is dependent upon positions of the driving pedal (11) and the selector lever (8) and is reduced as the driving resistance increases.



10/798,172

REMARKS

**DRAFT**

The following is a proposed reply to the Advisory Action of February 16, 2006, which is issued in response to the Response After Final Pursuant to 37CFR 1.116 of February 6, 2006, which was submitted in reply to the Final Office Action of January 9, 2006.

Claims 17-24 are presently pending in this Application and the Examiner has sustained the rejections of claims 17-24 over the prior art that were expressed in the Final Rejection of January 9, 2006.

In brief, the Examiner states in the Advisory Action that claim 17 (and claims 18 and 24) do not clearly recite that the driving speed of the propulsion drive is dependent on the pedal position when the drive engine is operating at maximum power.

In reply, the Applicant offers the above amendments to claims 17, 18 and 24 in which this limitation is expressly added to the last paragraph of claims 17, 18 and 24, that is, to the paragraph pertaining to operation of the engine at maximum power.

The Examiner also disagrees with the Applicant's position that Evans '520 does not include an auxiliary drive.

Upon consideration, the Applicant must agree that the statement that Evans '520 does not include an auxiliary drive is an overstatement in as much as Evans '520 does mention some form of auxiliary equipment or hydraulic implement at, for example, column 1, line 33, and column 7, lines 13-17. The Applicant should have instead expressed this thought as the statement that while Evans '520 does mention some form of auxiliary equipment or hydraulic implement, Evans '520 does not relate such auxiliary equipment or hydraulic implement to the operation of the engine. In particular, Evans '520 actually only describes a method for controlling the degree of engagement of the impeller clutch 116 by controlling the impeller clutch pressure and the brake pressure so that the ground speed of the machine, and only the ground speed of the machine, is proportional to the angle of depression of the impeller pedal. That is, the Evans '520 disclosure relates only to control of motion of the machine and does not describe in any way how this relates to the operation of any auxiliary equipment or hydraulic implement that may be present.

In particular, and as stated by the Applicant in the Response After Final, Evans '520 does not teach or suggest any form of system for apportioning power between a drive transmission for moving the vehicle over a surface and any form of an auxiliary drive for driving a working hydraulic system in such a manner as to ensure at least a minimum required power to the working hydraulic

10/798,172

system and reducing the power to the transmission, as necessary, to maintain the supply of adequate of driving power for the vehicle. In this regard, it must be noted that the entire function of the Evans '520 system is to maintain power to the transmission so that the vehicle moves over a surface at a speed determined by the pedal position.

The Applicant therefore respectfully believes that the present invention as recited in claims 17, 18 and 24 according to the amendments proposed herein above clearly incorporate the recitation in question into the recitations pertaining to operation of the engine at maximum power and that this recitation fully distinguishes claims 17, 18 and 24 over the cited prior art, so that the proposed amendments render the claims allowable. The Applicant therefore respectfully requests entry of the proposed amendments and allowance of the claims as amended.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,

**DRAFT**

Gary D. Clapp, Reg. No. 29,055  
Customer No. 020210  
Davis & Bujold, P.L.L.C.  
Fourth Floor  
500 North Commercial Street  
Manchester NH 03101-1151  
Telephone 603-624-9220  
Facsimile 603-624-9229  
E-mail: [patent@davisandbujold.com](mailto:patent@davisandbujold.com)